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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Jeffrey A. Frisco

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EXAMINER

PARRY, CHRISTOPHER L

ART UNIT

PAPER NUMBER

2623

NOTIFICATION DATE

DELIVERY MODE

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ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

creganoa@addmg.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/716,987	<b>Applicant(s)</b> FRISCO ET AL.	
	<b>Examiner</b> CHRIS PARRY	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-23 and 26-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-23 and 26-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 03 January 2008 have been fully considered but they are not persuasive.

In response to applicant's argument (Page 11, lines 6-8) stating, there is no motivation to selectively combine the references to produce the claimed invention, the examiner respectfully disagrees.

Sklar discloses an in-flight broadcast programming distribution system which is a satellite-based distribution system that includes several satellite uplink facilities, each having its own compilation of programming choices and signal characteristics (Col. 5, lines 41-65). Further included is an in-flight receiver station which receives television signals broadcast from the direct broadcast satellites, and distributes the received television programming to passengers on the aircraft. Sklar further discloses the use of region control unit 44 which is pre-programmed with information about the various direct broadcast satellite systems, including coverage area, signal strength, etc. (Col. 9, lines 61-64). Region control unit 44 is further programmed to detect whether a selected program by a passenger can be viewed in its entirety and if the program cannot be viewed, then region control unit instructs the viewer to change channels by providing an overlay on the passenger's monitor (Col. 10, line 32 to Col. 11, line 55).

Gangitano discloses a home satellite receiver system 10 which includes an antenna 12 coupled to a receiver 14 (Col. 2, lines 56-65). Receiver 14 includes means for detecting a received signal strength (signal strength detector 22 – figure 4) of a

signal received at antenna 12 and means for automatically generating a display signal indicative of the receive signal strength whenever the received signal strength is below a preset threshold (Col. 1, line 65 to Col. 2, line 11). Gangitano further discloses receiver 14 includes signal strength detector 22 (shown in figure 4) can be used to provide the viewer at home useful information related to the received signal strength, such as a message to alert the viewer if the signal strength is below an acceptable level (Col. 3, lines 9-19 and Col. 4, lines 7-57). Additionally, receiver 14 can also detect if the receiver no longer detects any signals from antenna 12 and in this case an alert can be provided to the user to indicate a problem with user's receiver system 10 (i.e., claimed component malfunction) (Col. 4, line 63 to Col. 5, line 5).

The systems of Sklar and Gangitano are analogous to each other as both describe systems which receive direct broadcast satellite signals via an antenna and distribute the received television programming to a viewer(s), whether the viewer is at home or on an aircraft. Furthermore, Sklar and Gangitano disclose methods and systems for detecting the signal strength of a received satellite signal. Sklar discloses detecting signal strength by using pre-programmed information about various features of various direct broadcast satellite systems, including coverage area, signal strength, etc. With this information, the in-flight receiver station can predict ahead of time whether the user will encounter a weak signal condition and can either automatically switch the channel for the user so as not to disturb the viewer (Col. 10, lines 32-41) or the receiver can provide feedback to the viewer by providing an overlay screen used to inform the user that the program will no longer be available in 15 minutes and to try another

channel (Col. 11, lines 22-45). By changing the channel automatically or providing the overlay to the user, the user is provided with information related to programming that will cause for concern to passengers.

However, since Sklar is silent on disclosing detecting a component malfunction condition as claimed in amended claim 1, the system of Sklar is improved with the additional features of signal strength detector 22 as taught by Gangitano (Col. 3, lines 9-19). With the addition of the signal strength detector 22 taught by Gangitano to Sklar, the in-flight receiver station may detect whether there is a problem with the receiver system, as the case maybe if the SRD system 40 (figure 2) no longer detects any signals arriving from antenna 38 (figure 2).

Therefore, the art shows that one of ordinary skill in satellite receiver systems art at the time of the invention would have been familiar with signal strength detectors and their use in detecting the signal strength of the received signal for the benefit of determining whether the signal is weak or non-existent is due to transmission (signal is weak due to environmental conditions) or equipment failure (signal is not being received from antenna).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 5-10, 13-19, 22-23, and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sklar et al. "Sklar" (USPN 5,990,928) [of record] in view of Gangitano (USPN 6,580,452) [of record].

Regarding Claim 1, Sklar discloses an aircraft in-flight entertainment system (50 – figure 1) (Col. 7, lines 57-61) comprising:

a satellite television (TV) receiver (42 – figure 2) (Col. 8, lines 62-67);

at least one passenger video display (56 – figure 1) connected to said satellite TV receiver (Col. 9, lines 26-35); and

a processor (44 – figure 2) connected to said satellite TV receiver for determining an undesired condition (i.e., determine that the aircraft is about to leave the coverage area) (Col. 9, line 61 to Col. 10, line 8) and for generating responsive thereto a substitute image on said at least one passenger video display rather than permit display of an undesired image which would otherwise be produced (i.e., region control unit 44 instructs receiver unit 42 to switch to a different program) (Col. 10, lines 32-47 and Col. 11, lines 9-33).

Sklar discloses region control unit 44 or "processor" is configured to monitor coverage area and signal strength of the direct broadcast satellite system, wherein the undesired condition is the aircraft leaves a coverage area of a satellite before a particular program can finish. However, Sklar is silent on disclosing a processor connected to said satellite TV receiver for determining a component malfunction condition.

In an analogous art, Gangitano discloses an apparatus for displaying a received signal strength comprising, a processor (22 – figure 4) connected to said satellite TV receiver (14 – figure 4) for determining a component malfunction (Col. 3, lines 9-19; Col. 4, lines 24-26; and Col. 4, line 63 to Col. 5, line 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sklar to include wherein the processor determines that there is a component malfunction condition as taught by Gangitano for the benefit of providing a user-friendly notification of an indication of why a video image has suddenly froze on the screen of their display.

As for Claim 2, Sklar and Gangitano disclose, in particular Sklar teaches wherein said satellite TV receiver comprises a direct broadcast satellite (DBS) receiver (Col. 5, lines 41-65).

As for Claim 5, Sklar and Gangitano disclose, in particular Gangitano teaches wherein the undesired image is a degraded program image (Col.3, lines 20-62 & Col. 4, lines 7-36).

As for Claim 6, Sklar and Gangitano disclose, in particular Sklar teaches region control unit 44 or “processor” is configured to monitor coverage area and signal strength of the direct broadcast satellite system, wherein the undesired condition is the aircraft leaves a coverage area of a satellite before a particular program can finish. However,

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the combination of Sklar and Gangitano are silent on disclosing wherein the undesired image is default text message image. The examiner gives Official Notice that it is notoriously well known in the art to monitor the broadcast for text, images, graphics, and any other images within a program and replacing the detected image with a more customized image for the user.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sklar to include wherein the undesired image is default text message image for the benefit of detecting a non-customized image and replacing the image with a more user-friendly image for the user.

As for Claim 7, Sklar and Gangitano disclose, in particular Gangitano teaches a storage device (32 – figure 7) connected to said processor (36 – figure 7) for storing the substitute image (figures 6a-6c) (Col. 5, lines 9-25).

As for Claim 8, Sklar and Gangitano disclose, in particular Sklar teaches wherein said satellite TV receiver generates a plurality of individual video channels (Col. 8, line 62 to Col. 9, line 29); and wherein said processor determines the undesired condition for each of the individual video channels (Col. 9, line 61 to Col. 10, line 8 and Col. 10, lines 32-41).

As for Claim 9, Sklar and Gangitano disclose, in particular Sklar teaches wherein said satellite TV receiver generates a plurality of video channels (Col. 8, line 62 to Col.



9, line 29); and wherein said processor determines the undesired condition for the plurality of video channels (Col. 9, line 61 to Col. 10, line 8 and Col. 10, lines 32-41).

As for Claim 10, Sklar and Gangitano disclose, in particular Sklar teaches wherein said at least one passenger video display comprises a plurality of passenger seatback video displays (56 – figure 1) (Col. 7, lines 57-61).

Regarding Claim 13, Sklar discloses an aircraft in-flight entertainment system (50 – figure 1) (Col. 7, lines 57-61) comprising:

- a satellite television (TV) receiver (42 – figure 2) (Col. 8, lines 62-67);

- a plurality of passenger video displays (56 – figure 1) connected to said satellite TV receiver (Col. 9, lines 26-35); and

- a processor (44 – figure 2) connected to said satellite TV receiver for determining a signal strength condition (i.e., determine that the aircraft is about to leave the coverage area) (Col. 9, line 61 to Col. 10, line 8) and for generating responsive thereto a substitute image on said passenger video displays prior to display of an undesired image which would otherwise be produced (i.e., region control unit 44 instructs receiver unit 42 to switch to a different program) (Col. 10, lines 32-47 and Col. 11, lines 9-33).

However, Sklar is silent on disclosing a processor connected to said satellite TV receiver for determining a weak received signal strength condition.

In an analogous art, Gangitano discloses an apparatus for displaying a received signal strength comprising, a processor (22 – figure 4) connected to said satellite TV

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receiver (14 – figure 4) for determining a weak received signal strength condition (Col. 3, lines 9-19 & lines 53-62) and for generating responsive thereto a substitute image...(figures 6a-6c) (Col. 3, lines 20-30; Col. 4, lines 7-17; Col. 4, line 45 to Col. 5, line 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sklar to include wherein the processor determines the weak received signal strength condition as taught by Gangitano for the benefit of providing a user-friendly notification of an indication of why a video image has suddenly froze on the screen of their display.

As for Claim 14, Sklar and Gangitano disclose, in particular Sklar teaches wherein said satellite TV receiver comprises a direct broadcast satellite (DBS) receiver (Col. 5, lines 41-65).

As for Claim 15, Sklar and Gangitano disclose, in particular Gangitano teaches wherein the undesired image is a degraded program image (Col.3, lines 20-62 & Col. 4, lines 7-36).

As for Claim 16, Sklar and Gangitano fail to specifically disclose wherein the undesired image is default text image. The examiner gives Official Notice that it is notoriously well known in the art to monitor the broadcast for text, images, graphics, and any other images within a program and replacing the detected image with a more customized image for the user.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sklar to include wherein the undesired image is default text message image for the benefit of detecting a non-customized image and replacing the image with a more user-friendly image for the user.

As for Claim 17, Sklar and Gangitano disclose, in particular Gangitano teaches a storage device (32 – figure 5) connected to said processor for storing the substitute image (figures 6a-6c) (Col. 5, lines 9-25).

As for Claim 18, Sklar and Gangitano disclose, in particular Sklar teaches wherein said satellite TV receiver generates a plurality of individual video channels (Col. 8, line 62 to Col. 9, line 29); and wherein said processor determines the undesired condition for each of the individual video channels (Col. 9, line 61 to Col. 10, line 8 and Col. 10, lines 32-41).

As for Claim 19, Sklar and Gangitano disclose, in particular Sklar teaches wherein said satellite TV receiver generates a plurality of video channels (Col. 8, line 62 to Col. 9, line 29); and wherein said processor determines the undesired condition for the plurality of video channels (Col. 9, line 61 to Col. 10, line 8 and Col. 10, lines 32-41).

Regarding Claim 22, Sklar discloses a method for operating an aircraft in-flight entertainment system (50 – figure 1) (Col. 7, lines 57-61) comprising a satellite

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television (TV) receiver (42 – figure 2) (Col. 8, lines 62-67); at least one passenger video display (56 – figure 1) connected to said satellite TV receiver (Col. 9, lines 26-35); the method comprising:

determining an undesired condition (i.e., determine that the aircraft is about to leave the coverage area) (Col. 9, line 61 to Col. 10, line 8); and

generating a substitute image on the at least one passenger video display rather than permit display of an undesired image which would otherwise be produced (i.e., region control unit 44 instructs receiver unit 42 to switch to a different program) (Col. 10, lines 32-47 and Col. 11, lines 9-33).

However, Sklar is silent on determining a weak received signal strength condition. In an analogous art, Gangitano discloses a method for displaying a received signal strength comprising, determining a weak received signal strength condition (Col. 3, lines 9-19 & lines 53-62) and generating a substitute image (figures 6a-6c) (Col. 3, lines 20-30; Col. 4, lines 7-17; Col. 4, line 45 to Col. 5, line 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sklar to include wherein the processor determines the weak received signal strength condition as taught by Gangitano for the benefit of providing a user-friendly notification of an indication of why a video image has suddenly froze on the screen of their display.

Considering Claim 23, the claimed elements of wherein the satellite TV receiver comprises a direct broadcast satellite (DBS) receiver, corresponds with subject matter mentioned above in the rejection of claim 2, and is likewise treated.

Considering Claim 26, the claimed elements of wherein the undesired image is a degraded program image, corresponds with subject matter mentioned above in the rejection of claim 5, and is likewise treated.

Considering Claim 27, the claimed elements of wherein the undesired image is default text message image, corresponds with subject matter mentioned above in the rejection of claim 6, and is likewise treated.

Considering Claim 28, the claimed elements of storing the substitute image, corresponds with subject matter mentioned above in the rejection of claim 7, and is likewise treated.

Considering Claim 29, the claimed elements of wherein the satellite TV receiver generates a plurality of individual video channels, corresponds with subject matter mentioned above in the rejection of claim 8, and is likewise treated.

Considering Claim 30, the claimed elements of wherein the satellite TV receiver generates a plurality of video channels, corresponds with subject matter mentioned above in the rejection of claim 9, and is likewise treated.

4. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sklar in view of Gangitano as applied to claim 1 above, and further in view of Galipeau et al. "Galipeau" (USPN 6,249,913) [of record].

As for Claim 11, Sklar and Gangitano disclose, in particular Sklar teaches aircraft entertainment system 50 includes a signal distribution network 54 that connects the headend 52 to a plurality of peripherals 56 consisting primarily of passenger seat stations or terminals (Col. 7, lines 57-61). However Sklar and Gangitano are silent on disclosing a plurality of signal distribution devices connected to a cable network and connecting said signal distribution devices to passenger video displays.

In an analogous art, Galipeau discloses an aircraft in-flight entertainment system (figure 1), wherein said at least one passenger video display (154 – figure 6B) comprises a plurality of passenger video displays (154 – figure 6B & figure 9B) (Col. 10, lines 19-22), and further comprising: a plurality of signal distribution devices (18 – figures 1, 3, & 9b) (Col. 4, lines 1-15); and a cable network (20 – figures 1, 3, and 9) connecting said satellite TV receiver (186 – figure 9A) (Col. 10, lines 17-60) to said signal distribution devices (figure 9B) (Col. 4, lines 13-20 and Col. 5, lines 26-31), and connecting said signal distribution devices to said passenger video displays (154 – figure 6B & figure 9b) (Col. 4, lines 1-20). Therefore it would have been obvious to one

of ordinary skill in the art at the time the invention was made to modify Sklar and Gangitano to include a plurality of signal distribution devices connected to a cable network and connecting said signal distribution devices to passenger video displays as taught by Galipeau for the benefit of providing an aircraft entertainment system with sufficient flexibility to support and integrate the entertainment and data needs of commercial aircraft passengers.

As for Claim 12, Sklar and Gangitano are silent on disclosing wherein the aircraft is a narrow-body aircraft having a single passenger aisle.

In an analogous art, Galipeau discloses an aircraft in-flight entertainment system (figure 1), wherein the aircraft is a narrow-body aircraft having a single passenger aisle (Col. 3, lines 54-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sklar and Gangitano to include wherein the aircraft is a narrow-body aircraft having a single passenger aisle as taught by Galipeau for the benefit of providing an aircraft entertainment system with sufficient flexibility to support and integrate the entertainment and data needs of commercial aircraft passengers on smaller aircrafts.

5. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sklar in view of Gangitano as applied to claim 13 above, and further in view of Galipeau.

As for Claim 20, Sklar and Gangitano disclose, in particular Sklar teaches an aircraft entertainment system 50 includes a signal distribution network 54 that connects the headend 52 to a plurality of peripherals 56 consisting primarily of passenger seat stations or terminals (Col. 7, lines 57-61). However Sklar and Gangitano are silent on disclosing a plurality of signal distribution devices connected to a cable network and connecting said signal distribution devices to passenger video displays.

In an analogous art, Galipeau discloses an aircraft in-flight entertainment system (figure 1), comprises a plurality of signal distribution devices (18 – figures 1, 3, & 9b) (Col. 4, lines 1-15); and a cable network (20 – figures 1, 3, and 9) connecting said satellite TV receiver (186 – figure 9A) (Col. 10, lines 17-60) to said signal distribution devices (figure 9B) (Col. 4, lines 13-20 and Col. 5, lines 26-31), and connecting said signal distribution devices to said passenger video displays (154 – figure 6B & figure 9b) (Col. 4, lines 1-20). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sklar and Gangitano to include a plurality of signal distribution devices connected to a cable network and connecting said signal distribution devices to passenger video displays as taught by Galipeau for the benefit of providing an aircraft entertainment system with sufficient flexibility to support and integrate the entertainment and data needs of commercial aircraft passengers.

As for Claim 21, Sklar and Gangitano are silent on disclosing wherein the aircraft is a narrow-body aircraft having a single passenger aisle.



In an analogous art, Galipeau discloses an aircraft in-flight entertainment system (figure 1), wherein the aircraft is a narrow-body aircraft having a single passenger aisle (Col. 3, lines 54-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sklar and Gangitano to include wherein the aircraft is a narrow-body aircraft having a single passenger aisle as taught by Galipeau for the benefit of providing an aircraft entertainment system with sufficient flexibility to support and integrate the entertainment and data needs of commercial aircraft passengers on smaller aircrafts.

6. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sklar in view of Gangitano as applied to claim 22 above, and further in view of Galipeau.

As for Claim 31, Sklar and Gangitano are silent on disclosing wherein the aircraft is a narrow-body aircraft having a single passenger aisle.

In an analogous art, Galipeau discloses an aircraft in-flight entertainment system (figure 1), wherein the aircraft is a narrow-body aircraft having a single passenger aisle (Col. 3, lines 54-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sklar and Gangitano to include wherein the aircraft is a narrow-body aircraft having a single passenger aisle as taught by Galipeau for the benefit of providing an aircraft entertainment system with sufficient flexibility to support and integrate the entertainment and data needs of commercial aircraft passengers on smaller aircrafts.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRIS PARRY whose telephone number is (571) 272-8328. The examiner can normally be reached on Monday through Friday, 8:00 AM EST to 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CHRIS PARRY  
Examiner  
Art Unit 2623

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Examiner, Art Unit 2623

/Christopher Grant/  
Supervisory Patent Examiner, Art Unit 2623